

REMARKS

The indication of allowable subject matter in claims 5, 7-9, 12 and 22-26 is acknowledged and appreciated.

Claim 2 is the sole independent claim currently rejected over prior art.

Claim 2 stands rejected under 35 U.S.C. § 102 as being anticipated by Kaya et al. ('384), Burr et al. ('912) and JP '888. These rejections are respectfully traversed for the following reasons.

A telephone interview was conducted with Examiner Quinto to help expedite prosecution. Applicant and Applicants' representative would like to thank Examiner Quinto for his courtesy in conducting the interview and for his assistance in resolving issues. A summary of the interview follows.

Claim 2 recites in pertinent part, "a channel region is formed near the surface of said semiconductor region *directly* above said embedded drain region such that the channel region reaches the surface of said semiconductor region" (emphasis added). It is respectfully submitted that none of the cited prior art disclose or suggest the aforementioned feature in combination with the other features recited in claim 2.

In the outstanding Office Action, the Examiner relies on the Sedra and Smith publication (hereinafter, "Sedra") as evidence that each of Kaya et al., Burr et al., and JP '888 would create a channel region "directly above" the alleged embedded drain region as recited in claim 2. However, it is respectfully submitted that even assuming *arguendo* that the triangular-shaped channel region shown in Sedra was formed in each of Kaya et al., Burr et al., and JP '888, such a channel would at best be formed above the respective alleged embedded drain regions but off-set to *a side thereof* so as not to be "directly above."

As shown in the various embodiments described throughout Applicants' specification and drawings, the channel region (e.g., 11a) is positioned *directly* above the embedded drain region so as to enable at least a portion of the channel to be positioned between the substrate surface and the embedded drain region relative to the vertical axis.

In the outstanding Office Action, it appears that the Examiner may not have differentiated between "above" and "directly above." However, as explained above, "directly above" requires at least a portion of the channel to be formed so that a vertical axis extending from the embedded drain region will run into the channel region. According to the present invention, therefore, at least a portion of the embedded drain region and channel region can be vertically aligned with or without other layer(s)/region(s) positioned therebetween, so as to enable an improvement in operation of the device.

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed, either expressly or inherently (noting that "inherency may not be established by probabilities or possibilities" (*see Scaltech Inc. v. Retec/Tetra*, 178 F.3d 1378 (Fed. Cir. 1999)) in a single prior art reference, *Akzo N.V. v. U.S. Int'l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), and because none of Kaya et al. ('384), Burr et al. ('912) and JP '888 disclose or suggest the combination of features recited in claim 2, it is submitted that Kaya et al. ('384), Burr et al. ('912) and JP '888 do not anticipate claim 2, nor any claims dependent thereon. In addition, it is submitted that claims 3-12 are patentable based on their own merits by adding novel and non-obvious features to the combination. Based on all the foregoing, it is submitted that claims 2-12 are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejection of claims 2-12 under 35 U.S.C. § 102 be withdrawn.

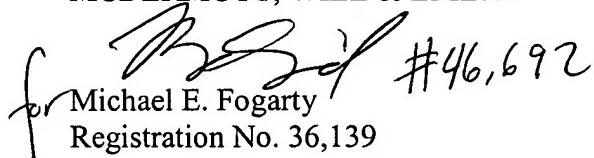
CONCLUSION

Having fully and completely responded to the Office Action, Applicants submit that all of the claims are now in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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